

# Superfund Amendments & Reauthorization Act (SARA TITLE III)

<u>OR</u>

Emergency Planning & Community Right-to-Know Act (EPCRA)

Presented by Ian Ewusi IERC Field Representative

### EPCRA Regulations

EPA REGULATORY CHANGES to 40 CFR Parts 355 and 370 (Proposed 6/8/98, finalized on 10/17/08 and published 11/3/08)



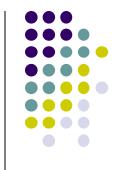
- Emergency Planning—Sections 302 & 303 [40 CFR Part 355.30] Amended
- Emergency Notification—Section 304 & Comprehensive Environmental Response, Compensation, Liability Act CERCLA 103 [40 CFR Parts 302 & 355.40] Amended
- Hazardous Chemical Reporting—Sections 311 & 312 [40 CFR Part 370] Amended
- Toxic Chemical Reporting—Section 313 [40 CFR Part 372]

# TPQ (Threshold Planning Quantity)



- > ONLY EHSs have published TPQs (lbs)
- > Solids are subject to either of 2 TPQs (e.g., 500/10,000 lbs)
  - \* 500 lbs ==> Powder form (100 $\mu$ ) or
    - ==> Molten form or
    - ==> Reactivity under the National Fire Protection Association rating of 2, 3, or 4
  - 10,000 lbs otherwise (level of lowest concern)

### Minimum Threshold Level



The storage quantity which subjects a facility to the reporting requirements of EPCRA Sections 311 and 312

For hazardous substances/chemicals (HS)

→ 10,000 lbs

For Extremely Hazardous Substances (EHSs)

→ TPQ or 500 lbs (whichever is less)

### EPCRA Reporting Requirements

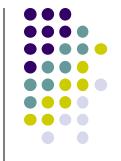


- \* Sections 302 & 303 (Emergency Planning)
  - Presence of one or more EHSs over TPQ
  - Report within 30 days of acquisition of EHS
  - Report to IERC and respective LEPC—No EXEMPTIONS

#### \* Section 304 (Emergency Notifications)

- Accidental chemical release above reportable quantity (RQ) that will migrate off site
- Immediate verbal notification to state and LEPC if EHS and to National Response Center if HS (for CERCLA 103)
- Written notification to IERC and LEPC

### EPCRA Reporting Requirements



#### Hazardous Chemical Reporting

Presence of one or more EHSs ≥ TPQ or 500 lbs (whichever is less)

Presence of one or more HSs ≥ 10,000 lbs

Report to IERC, LEPC and Fire Departments

#### \* Section 311

- List of MSDS chemicals
- One-time submission (information remains unchanged)
- Within 90 days of receipt of new information on chemical(s)

#### \* Section 312 (Tier IIs)

Annual submission (due by March 1)

### Exemptions—Section 304

Emergency Notifications—40 CFR 302.4 and 355.31



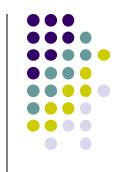
- Releases which result in exposure only to persons solely within the facility boundaries
- "Federally permitted release" as defined under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) Section 101(10)
- Releases of a pesticide product that is exempt from reporting under section 103(e) of CERCLA
- Any release that does not meet the definition of release under section 101(22) of CERCLA and is therefore exempt from CERCLA section 103(a) reporting
- Any radionuclide release that occurs

# Exemptions Hazardous Chemical Reporting Sections 311 & 312



- Solids—To the extent that exposure does not occur under normal conditions of use (except when solid is modified and exposure can occur)
- Facilities—Mining
- Transportation—Substances in or being stored incident to transport
- Substances—FDA-controlled; for personal/household purposes, research labs/hospitals, and routine agricultural operations

## Toxic Chemical Reporting Section 313



#### Reporting Criteria

Manufacture, process, or otherwise use "toxic chemical" in quantities above threshold

#### Report Type

Toxic Chemical Release Inventory (TRI) report (i.e., Form R Report)

Timeline—Annual submission (due by July 1)

#### Agencies

EPA—CEPPO (800)535-0202 State—IDEM (800)451-6027 (317)232-8172

### Emergency Notification-Duties EPCRA Section 304



- EHS & CERCLA Chemicals ≈ 765 (List of Lists)
- Releases/Spills ≥ Reportable Quantity (RQ)
  - Verbal notification (by spiller): Phone calls to...
    - IDEM spill line
    - LEPC in county
    - Fire Dept in jurisdiction
    - NRC: (800)424-8802
  - Detailed documentation of event as SARA Title III incident (by IDEM staff): Entries made into *Tempo* with...
    - Spiller contact information
    - Type of chemical released and quantity
    - Any additional information about release
  - Written notification (by spiller): Email attachment or U.S. mail

### Spill Report Written Notification

#### **EPCRA** Section 304

- Chemical identity or name of substance released
- 2. Identification of substance as an EHS or CERCLA HS
- 3. Estimation of quantity released
- 4. Indication of duration of release
- 5. Identification of medium into which release occurred
- Anticipation of health risks and advice regarding medical attention necessary
- 7. Precautions set by the facility to deal with the release
- 8. Information of the facility-designated contact person
- 9. All actions being taken by the facility

In addition to the above written requirements, the facility is also required to submit updates as more information becomes available.



http://emergencymanagement.supportportal.com/link/portal/23002/23016/ArticleFolder/629/Emergency-Planning-EPCRA-301-303

- Q If an extremely hazardous substance is not stored on-site but is produced in a process such as incineration, is it exempt from both TPQ calculation and release reporting if the release is covered by a Clean Air Act permit?
- A NO, a hazardous substance produced on-site in processes such as incineration, is considered present at the facility and subject to section 302 reporting requirements provided that the amount on-site exceeds the threshold planning quantity at any one time. However, if the release is federally permitted under section 101(10) of CERCLA, which includes permitted emissions into the air under the Clean Air Act, then the release need not be reported under section 304.
- Q Are on-site contractors responsible for reporting EHSs brought on-site?
- YES, a contractor could be considered an operator of the facility or of a portion of the facility depending on whether he/she has enough authority. If the contractor is considered an "operator," he/she could be held liable for not making the required notifications under sections 302 or 304. If no notification is made under sections 302 and 304, owner and operator will be held liable.



- Q How are the quantities of EHSs calculated in determining if a <u>landfill</u> is subject to section 302 requirements?
- A Owners of these facilities must determine, based on reasonably available information, whether any EHSs are in excess of the TPQs. However, in making such a determination, owners and operators of landfills should apply the one percent (1%) exclusion (see 40 CFR 355.13). EPA believes that the 1% exclusion is applicable to the contents of the entire landfill based on the assumption that such containers will degrade in the landfill environment.



- Q When calculating vulnerability zone distances, how would the quantity released (QR) be handled for an EHS in solution?
- A If the EHS is in solution, a facility can make a rough estimate of the QR using equation 1 on page G-2 of the "Technical Guidance for Hazards Analysis." If the facility has information on the physical properties of the EHS in solution, the following can be used to calculate the QR of the EHS.

Where:

QR = Rate of release to air (lbs/min)

MW = Molecular weight (g/g mole)

K = Gas phase mass transfer coefficient (cm/sec)

 $A = Surface area of spilled material (ft^2)$ 

VP = Vapor pressure of material at temperature T1 mm HG)

R = 82.05 atm cm<sup>3</sup>/g mole K

T1 = Temperature at which the chemical is stored (C)

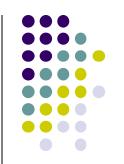


- Q When calculating vulnerability zone distances, how would the quantity released (QR) be handled for an EHS in solution?
- A If physical properties of the EHS in solution are not available, the QR can be estimated using the physical properties of the EHS. This would reflect the QR of the EHS in its pure form. Since the EHS is in solution, the QR would need to be multiplied by the mole fraction of the EHS in solution to accurately reflect the QR of the EHS. If the facility only has the weight fraction of the EHS solution, the weight fraction can be used instead of the mole fraction to estimate the QR of the EHS.

http://emergencymanagement.supportportal.com/link/portal/23002/23016/ArticleFolder/662/Release-Notification-EPCRA-304-CERCLA-103

- Q Should all EPCRA chemical releases be reported?
- A NO, only accidental releases ≥ RQs.
- Q Where should the written reports be sent?
- A To the IERC, but they are ultimately filed with IDEM.
- Q Is a release reportable if it's been processed by the local waste water treatment system?
- A YES, if it involves an EPCRA-reportable chemical. Note that NPDES/SDWA may be applicable in this scenario.
- Are releases into a Publicly Owned Treatment Works (POTW) subject to CERCLA section 103(a) reporting requirements when the pollutant is specified in and in compliance with the pretreatment standards of the Clean Water Act, subject to CERCLA section 103(a) reporting requirements?
- A NO, releases permitted under other federal programs as defined by CERCLA section 101(10)(J) are exempt from CERCLA section 103(a) reporting requirements.

http://emergencymanagement.supportportal.com/link/portal/23002/23016/ArticleFolder/662/Release-Notification-EPCRA-304-CERCLA-103



- Q Are reports made to state and local government agencies relayed to the National Response Center (NRC) and, if so, does the original call satisfy reporting requirements under CERCLA section 103?
- Although reports are sometimes passed on to the NRC by state and local government agencies, a person responsible for reporting under CERCLA relies on such state or local "relay" of information at his/her own risk. This relay of information does not automatically satisfy CERCLA reporting requirements, and state or local agencies cannot be responsible for an individual's compliance with a federal statute. CERCLA section 103(a) specifically requires the person in charge of a vessel or facility to report immediately to the NRC a release of a hazardous substance whose amount equals or exceeds the assigned RQ. If the appropriate information is not received within an appropriate timeframe at the NRC, the person responsible for CERCLA reporting still may be found not to have complied with the section 103 notification requirements.

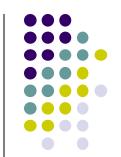
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- Q How does EPCRA address fertilizer application (e.g., 28% urea)?
- A Normal application of fertilizer would not need to be reported. However, an accidental release of such substances (or other release not generally in accord with its intended purpose) in excess of the RQ must be reported.
- Q Are pipelines, barges, and vessels subject to release notification?
- A NO, Title III (section 327) does not apply to the transportation of any substance or chemical including transportation by pipeline, except as provided in section 304, which requires notification from facilities of releases of EHSs and CERCLA hazardous substances. Section 327 exempts only HSs from reporting and does not otherwise exempt the facility.

http://emergencymanagement.supportportal.com/link/portal/23002/23016/ArticleFolder/750/Tier-II-Chemical-Inventory-Reporting-EPCRA-312

- Q If a retail gas station stores gasoline or diesel fuel in both aboveground and underground tanks, what EPCRA thresholds do they apply to determine if they have to report gasoline or diesel fuel on their Tier I or II form?
- A Any retail gas station that has at least 10,000 pounds of gasoline or diesel fuel stored in tanks that are not entirely underground must report the total gasoline or diesel fuel at the facility on its Tier I or II form, including any that is stored underground.

Similarly, any retail gas station that has at least 75,000 gallons of gasoline or 100,000 gallons of diesel fuel stored entirely underground must report on the total gasoline or diesel fuel at the facility, including any that is not stored entirely underground. In other words, if the facility triggers the threshold for either underground storage or aboveground storage, it reports on the total gasoline or diesel fuel at the facility.



http://emergencymanagement.supportportal.com/link/portal/23002/23016/ArticleFolder/750/Tier-II-Chemical-Inventory-Reporting-EPCRA-312

- Q When is a retail gas station considered "not in compliance" with UST requirements?
- A facility is not in compliance with the UST requirements (and therefore not eligible for the higher EPCRA thresholds) when it first fails to meet the UST requirements. For example, if an owner or operator of a retail gas station has a tank system that was not in compliance with UST requirements, that owner or operator cannot apply the higher thresholds.
- Q Is the growing of turf by a nursery considered routine agricultural operation?
- A YES, agricultural operations include nurseries and other horticultural operations. Therefore, chemicals used in direct support of turf growing by a nursery are exempt.

http://emergencymanagement.supportportal.com/link/portal/23002/23016/ArticleFolder/750/Tier-II-Chemical-Inventory-Reporting-EPCRA-312



- Q. Does this exemption apply if the turf is grown and maintained by a golf course?
- A NO, a golf course is not an agricultural operation. Golf courses derive their income from the playing of golf, not the sale of turf or other horticultural products.
- Q Does the agricultural use exemption apply to fuels used by harvesting services to transport crops from the farm to the market or the food processor?
- A NO, agricultural exemption is intended primarily to cover hazardous chemicals used or stored at the farm facility. Harvesting services are not considered to be part of the growing operation. Therefore, the fuel used by the harvesting service must be reported.
- Q Does the agricultural use exemption apply to the fuel used by the farmer to transport crops from the farm to the market or the food processor?
- A YES, fuel used by the farmer and which is located at the farm itself would be exempt.

# EPA REGULATORY CHANGES Summary



- Submit reports/notices according to timeline
- Include North American Industry Classification
   System (NAICS) code on Tier II form
- Provide the chemical or common name of the chemical (as listed on the MSDS) on the Tier II form
- Include the total quantity of EHS present in pure or mixture form, even if any mixture and/or EHS is reported as a hazardous chemical

### EPA REGULATORY CHANGES

#### Continued



- Use options 1 or 2 below to determine whether the threshold quantity is present for hazardous chemical mixtures that do not contain any EHSs
  - Add together the quantities present in pure form and as components in all mixtures
  - 2. Consider the total quantity of each mixture separately
- Submit reports in format requested by state
- Submit reports in format requested by LEPCs

### EPA REGULATORY CHANGES

#### Continued

- Submit any changes of facility information relevant to emergency planning within 30 days, such as
  - Facility is no longer using EHS in its operation
  - Presence of new EHSs
  - Changes in chemical locations on site
  - Elimination of EHSs on site
- Provide any information necessary for developing or implementing the local emergency plan if the LEPC requests it.



### Indiana EPCRA Reporting Method

Sections 302, 311 & 312 To the State, LEPC & Fire Depts



State—Online Reporting ONLY

#### LEPC—Contact to find out what method is acceptable

- Email attachment of state-generated report
- Tier2 Submit
- Paper reporting by mail

### Fire Depts—Contact to find out what method is acceptable

- Email attachment of state-generated report
- Paper reporting by mail



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